Amendments to the Claims

This listing of claims, if entered, will replace all prior versions and listings of claims in the above-identified application.

Listing of Claims

1.– 20. (Cancelled)

21. (Currently Amended) An apparatus comprising:

first and second client computers comprising first and second user interfaces, respectively, wherein

the first and second user interfaces are configured to be supported by a common metadata framework,

the first and second user interfaces comprise no business logic,
the common metadata framework comprises definitions, characteristics,
structure and usage of a set of data and processes,

the common metadata framework is configured to support the first and second user interfaces through a single metadata repository,

the common metadata framework is configured to support the first and
second user interfaces through a single layout definition, a single
business logic, a single set of data models and a single metadata
manipulation tool,

the first and second client computers comprise first and second keyboards, respectively, and

wherein the first and second keyboards comprise first and second tab buttons;
a server computer comprising a memory storing an object manager, wherein
the object manager is in data communication with a plurality of business objects,
each business object of the plurality of business objects comprising logic,
wherein the object manager is configured to control and monitor the business
objects[[;]]₂

- the object manager is interposed between said first and second clients and an application executing on the server computer,
- the application comprises the business objects and one or more business components,
- the business objects and the one or more business components comprise one or more applies and one or more application objects,

the application objects are configured to execute on the client,

- an object manager run-time engine is configured to operate on the business objects and the one or more business components,
- a transmission from said server to said first client comprises a notification,
- the notification is part of a group of notifications for transmission as part of a response to a client request,
- the object manager is configured to enforce a plurality of repository-defined business processes and rules,

the server is a shared server,

- the object manager is configured to interact with a database that provides storage to the object manager,
- the server computer is configured to measure loading of a central processing unit and direct requests to the object manager on the basis of loading,
- wherein the first and second client computer systems are configured to transmit first and second data, respectively, to the server, via first and second session based network connections, respectively, via the first and second user interfaces, respectively in response to users hitting the first and second tab buttons, respectively[[;]],
- wherein the first and second data are processed in accordance with first and second business objects, respectively, of the plurality of business objects[[;]],
- wherein the object manager is configured to receive first and second results of processing the first and second data, respectively, in accordance with the first and second business objects, respectively[[;]],

the business objects are configured to support role-based data visibility rules,

- the business objects are configured to perform a plurality of services, said plurality of services comprising
 - providing a template for said first client to make a request for a service,
 - providing a template for an interface to said server computer, and providing a template for returning a response from said server computer via a web server,
- the business objects are configured to be chosen from a group comprising

 horizontal applications, vertical applications and internet

 applications, wherein
 - the horizontal applications are function-specific applications

 comprising applications for sales, marketing and customer service,
 - the vertical applications are industry-specific applications comprising applications for finance, insurance, consumer goods, pharmaceuticals, and communications, and
 - the Internet applications comprise self-service applications, ecommerce applications, and channel management applications,
 and
- wherein the object manager is configured to forward the first and second results to the first and second computers, respectively, via the first and second session based network connections, respectively, wherein
 - the session based network connections are configured to provide

 persistent sessions between said first and second client

 computers and said server computer using a plurality of

 session-based network protocols that connect said first and
 second clients to said object manager,
 - during the persistent sessions, the first and second user interfaces are configured to apply field-level validation,
 - each business object of the business objects is configured to represent

 one of an account, a contact, a service request or an

 opportunity,

the object manager is configured to separately maintain a first status
of the first client and a second status of a second client in a first
object manager thread and a second object manager thread,
respectively,

the object manager is configured to support an administration framework for monitoring and administration,

the first object manager thread corresponds to a first active persistent session and the second object manager thread corresponds to a second active persistent session,

the results are forwarded in a compressed format.

- 22. (Previously Presented) The apparatus of claim 21 wherein the object manager is a multi-tasking, multi-thread process; and the object manager is configured to maintain a state of the first client and a state of the second client.
- 23. (Previously presented) The apparatus of claim 21 wherein the first user interface operates according to a first type of user interface technology.
- 24. (Previously presented) The apparatus of claim 23 wherein second user interface operates according to a second type user interface technology, wherein the first type is different from the second type.
 - 25. (Cancelled)
 - 26. (Cancelled)
 - 27. (Cancelled)
 - 28. (Currently Amended) A method comprising:

entering first and second data into first and second interfaces, respectively, using first and second keyboards, respectively, of first and second client computer systems, respectively,

supporting the first and second user interfaces with a common metadata framework, wherein

the supporting comprises supporting the first and second user interfaces with

a common metadata framework containing definitions,

characteristics, structure and usage of a set of data and processes,

the supporting comprises supporting the first and second user interfaces with

a common metadata framework from a single metadata repository,

the supporting comprises supporting the first and second user interfaces with

a common metadata framework with a single layout definition, a

single business logic, a single set of data models and a single metadata

transmitting the first and second data in a compressed format in response to users hitting first and second tab buttons, respectively, of the first and second keyboards, respectively;

manipulation tool;

- an object manager receiving the first and second data from the first and second client computer systems, respectively, via first and second session based network connections, respectively, wherein the object manager is in data communication
- communicating with a plurality of business objects including first and second business objects, each business object comprising distinct business logic; and processing the first and second data in accordance with business logic of the first and second business objects, respectively;
- returning to the object manager first and second results of processing the first and second data, respectively, in accordance with business logic of the first and second business objects, respectively;
- the object manager forwarding the first and second results to the first and second client computers, respectively, via first and second session based network connections, respectively.
- 29. (Previously Presented) The method of claim 28 wherein the first request from the first client computer is encrypted.

- 30. (Previously Presented) The method of claim 28 further comprising authenticating the first and second requests prior to processing the first and second requests.
- 31. (Previously Presented) The method of claim 28 wherein the first business object is a sales business object.
- 32. (Previously Presented) The method of claim 31 wherein the second business object is a customer service business object.
 - 33. (Cancelled)
- 34. (Previously presented) The method of claim 28 wherein the first client computer operates according to a first type of user interface technology.
- 35. (Previously presented) The method of claim 34 wherein the second client computer operates according to a first type of user interface technology, wherein the first type is different from the second type.